

## **ABSTRACT**

**Background and Objectives:** Mud therapy is a system of Naturopathic medicine where treatment is given using various forms of mud. Simultaneous application of cold Mud packs to abdomen and eyes is one of the most common treatment modalities in Naturopathy. Hence present study aims to evaluate the physiological effects of simultaneous application cold mud pack over abdomen and eyes by determining the cardiovascular and autonomic parameters of the study participants.

**Materials and Methodology:** 30 healthy volunteers were recruited for the study. All the volunteers were subjected to two sessions of treadmill run up to 10 minutes and subsequently on supine rest. Their first session was considered under Control trial, during which they were given a dry abdomen and eye pack after the treadmill run for 20 minutes. With a gap of 15 days in between, in the experimental trial they were given cold mud pack to abdomen and eyes during the supine rest after the treadmill run. HRV Assessments were done during the intervention and their BP and pulse were recorded immediate after the intervention.

**Results:** In the present study among the two evaluations, all HRV parameters in time domain and HF of frequency domain remain increased during the mud pack trial. Whereas LF of frequency domain, LF/HF ratio, HR and PR during mud pack trial is found to decrease. Blood Pressure (SBP), Diastolic Blood Pressure (DBP) also got reduced. This is suggestive of improvement in the sympatho-vagal balance reflecting

parasympathetic domination produced among the subjects after Mud pack intervention.

**Conclusions:** Simultaneous application of cold mud packs on the abdomen and eyes enhances the parasympathetic activity and could have a role in maintaining the cardiac tone and preventing various cardiovascular ailments.

**Keywords:** Cold Mud pack; Heart rate variability; Autonomic Nervous System.